Preliminary Amendment

Inventor: Christopher Weaver

Page 2

as high-temperature vacuum brazing. For example, probe tube 20 may possess a central diameter of approximately 8 mm while each of the plurality of tubes 32 might possess a diameter of approximately 2 mm. Referring to FIG. 3, it may be observed that tubes 34 and 36 include static pressure taps or openings 38 and 40, respectively, to chamber 28 of tube 20 at a location adjacent the tip of the probe tube 20. Directional arrows 41 indicate that chambers 42 and 44 of tubes 34 and 36 communicate with chamber 28 of tube 20. Tubes 46 and 48, on the other hand, include pressure taps 50 and 52 which communicate with chamber 16 of exhaust conduit 12. Directional arrows 54 and 56 indicate this communication. Thus, tubes 34 and 36 are capable of measuring the static pressure within chamber 28 of probe tube 20 to obtain an indication of the static pressure at the tip of the probe tube 20, while tubes 46 and 48 are capable of measuring the static pressure within exhaust conduit 12. Because the taps 50 and 52 are located adjacent the probe tube 20, they are capable of providing an indication of the static pressure in that portion of the exhaust gas stream that immediately surrounds the probe tube 20. Dual tubes are employed to eliminate disparate measurements of probe 12, due to the effect of small misalignments between the long axis 24 of probe 14 and the direction of flow, directional arrows 26, of the exhaust gas in exhaust conduit 12.

B)